

Application No. 10/788,921
Paper Dated: February 28, 2005
In Reply to USPTO Correspondence of September 30, 2004
Attorney Docket No. 4326-032044

IN THE SPECIFICATION

On page 7, in the “Brief Description of the Drawings” section, please replace paragraph [0019] in its entirety with the following paragraphs:

--Fig. 4 is a chart providing gauge pressure for specific cast iron outside diameter ranges;

Fig. 5 is a chart providing gauge pressure for PVC pipe with a standard dimension ratio of 41 over a range of pipe diameters;

Fig. 6 is a chart providing gauge pressure for PVC pipe with a standard dimension ratio of 32.5 over a range of pipe diameters;

Fig. 7 is a chart providing gauge pressure for PVC pipe with a standard dimension ratio of 26 over a range of pipe diameters;

Fig. 8 is a chart providing gauge pressure for PVC pipe with a standard dimension ratio of 21 over a range of pipe diameters; and

Fig. 9 is a chart providing gauge pressure for PVC pipe having a variable dimension ratio and a specified wall thickness over a range of pipe diameters.

On page 15, please insert the following new paragraphs after paragraph [0037] and before paragraph [0038]:

--In particular, Fig. 4 is a chart for providing a gauge pressure as detailed above. In particular, Fig. 4 is directed to pipe having a specified cast iron outside diameter (CIOD), which may also be referred to as ductile iron pipe size (DIPS). The CIOD or DIPS is a common sizing convention for pressure in municipal water pipes, as set forth in the appropriate AWWA Standards. With respect to polyvinyl chloride pipe, the outside diameter and dimension ratio (DR) is used to determine wall thickness. Dimension ratio is the quotient derived from the

Application No. 10/788,921
Paper Dated: February 28, 2005
In Reply to USPTO Correspondence of September 30, 2004
Attorney Docket No. 4326-032044

division of the outside diameter by the minimum wall thickness.

Fig. 5 is a chart providing gauge pressure for another common sizing convention of PVC pipe. Specifically, this convention is referred to as a Series or Iron Pipe Size (IPS) pipe. In this convention, the outside diameter is somewhat smaller than the CIOD or the DIPS size for the same nominal diameter. Accordingly, the standard dimension ratio (SDR) is defined as being identical to the dimension ratio in CIOD pipe. Therefore, SDR is used with Series or IPS pipe, whereas DR is used with CIOD or DIPS pipe. Fig. 5 provides the gauge pressure for standard IPS or Series sizes with an SDR of 41.

Fig. 6 also provides gauge pressure as discussed above in connection with Fig. 5. However, in Fig. 6, the nominal three-inch figure has been added, and the SDR is 32.5. Fig. 7 also provides gauge pressure, where the SDR is 26, and Fig. 8 still further provides gauge pressure, where the SDR is 21.

Finally, Fig. 9 is a chart that is similar to Fig. 8, except Fig. 9 introduces a variable dimension ratio for use when piping is sized by Schedule. Industrial use IPS sized pipe wall thickness is typically referred to as Schedule 40 or Schedule 80. This scheduling indicates a certain pressure rating and dimension ratio by size, as listed in Fig. 9.--